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HOW COULD WE EXPLORE THE TERRORIST ISSUE?

Current global research into terrorism can be deemed insufficient in many respects.¹ Too often studies focus on the same issues, concepts or examples. They frequently overlook factors or processes which exert an indirect or direct influence on terrorism (e.g. globalization, integration, financial crisis).²

There is also lack of applied empirical research in the field of terrorism studies as exemplified by the analysis of the literature made by Cynthia Lum, Leslie Kennedy and Alison Sherley, published in 2006. “Reviewing 4,458 peer-reviewed articles on terrorism, they concluded that 96 per cent of these studies were ‘think pieces’, 3 per cent had an empirical basis and only 1 per cent were case studies.” (Price, 2011: 461).³ The lack of empirical research in the field of terrorism is also illustrate the below table.

Table 1
Main topics of research on terrorism, according to a Campbell evaluation study (2005)

Subject matter	Peer-reviewed sources (n = 4,458)	Empirical only (n = 156)
1	2	3
Weapons of mass destruction (BNC)	18.1%	10.3%
Article on special issue (group or incidents)	12.2%	5.1%
Political responses to terrorism (war, politics, IR)	9.5%	1.9%
Causes, motivations, psychology, trends of terrorism	8.7%	18.1%
Impact of terrorism (political, social, economic)	7.7%	5.2%
Non-political responses to terrorism (medical, social, etc.)	5.5%	3.9%
Victimology, copying mechanisms, psych. effects of terrorism	5.4%	25.8%
Other (nationalism, democracy, etc.)	5.4%	3.9%

¹ Paradoxically, this situation occurs despite the existence of numerous publications on terrorism. For example, it is estimated that over two thousand new books on terrorism were published over the period of 2001–2008, A. Silke (2009), *Contemporary Terrorism Studies: Issues in Research*, in: *Critical Terrorism Studies: A New Research Agenda*, (eds.) R. Jackson, M. Breen Smyth and J. Gunning, London, p. 34. If one search for books on terrorism with amazon.com, one finds more than 21,000 items (November 2010) and 31,000 items (September 2013) – 29,000 books.

² This publication is based on the book: S. Wojciechowski (2013), *The Hybridity of Terrorism. Understanding Contemporary Terrorism*, Berlin.

³ A. Schmid shows that C. Lum, L. Kennedy and A. Sherley “missed out many good studies (e.g. all books) that did not fit their electronic research methodology. Nevertheless, their study was a reminder that empirical research is still the exception in the field of Terrorism Studies.”

1	2	3
Legal issues surrounding terrorism	5.2%	0.6%
Media and public attitudes towards terrorism	4.6%	18.7%
How to define terrorism	4.2%	1.3%
Non-conventional terrorism, cyber-terrorism and narco-terrorism	3.0%	0.6%
Religion and terrorism	2.6%	1.3%
State-sponsored terrorism	2.6%	1.3%
Law enforcement responses to terrorism (airport, police)	2.5%	0.6%
Research/science of studying terrorism	2.1%	0.6%
Domestic terrorism	0.6%	0.6%

Source: E. Price (2011), *Library and Internet Resources for Research on Terrorism*, in: *The Routledge Handbook of Terrorism Research*, (ed.) A. Schmid, London–New York, p. 461.

Another difficulty while researching terrorism is adaptation of certain theories or scientific concepts. The problem of terrorism can be analyzed by means of a wide array of research theories and models. There is however a question which of these may be regarded as especially useful to analyze different aspects of terrorism such as its reasons, characteristics or effects. Among concepts or theories which more or less fulfill the above-mentioned requirements, one can mention for instance: chaos theory, decision theory, spatial competition theory, involves salience theory, exchange theory, black box theory, theory of disaster, expected utility theory, models or methods from topology, system model, model of billiard balls, core model, asymmetrical model, network model or concept of hybridity.

The first example is **chaos theory**, which, among other things, analyzes the consequences of various disturbances that occur in a given system. When terrorism is approached as a system, chaos theory can be applied to examine the influence various factors exert on it, in particular those than can significantly alter its features, specificity, range of occurrence and so on. Such factors include, for example, globalization and technical progress.

Another concept that studies on terrorism employ is **decision theory**, used to explain the behavior of individuals and groups primarily under conditions involving risk and uncertainty. Decision theory can therefore be applied to examine the behaviors and attitudes of individual terrorists, their leaders, terrorist organizations and the entities that combat or support them.

One can also use **spatial competition theory**, which constitutes a part of social choice theory. This is primarily useful for the analysis of election results, or election preferences. It can, however, also serve the purpose of determining the degree of popularity of a given terrorist organization and its slogans, to assess its activity, and so on. This concerns, for example, the range and reasons for support for *Hamas*, *Hezbollah* and *al-Qaeda*, whether in a given territory (such as Afghanistan), or in the entire Muslim world.⁴

⁴ The analyses of the *Pew Research Center* can serve as an example here.

Another example **involves salience theory**, which can be used to analyze the activity of political parties or political systems. The same theory can, however, also be employed to assess the effectiveness of a terrorist organization's tactics, or strategy, or the efficiency of various counterterrorist services.

Another concept is **exchange theory**, which interprets social relations mainly in terms of an exchange mechanism that benefits both parties. Terrorism can also be perceived in these terms. Here, we examine the various benefits and costs borne by the entities that support, apply, or counter terrorism.

Black box theory can also be useful. It serves the purpose of demonstrating the relations that occur between the factors affecting a given system and the results of the system's operations. This theory can also be adapted to the study of terrorism, when analyzing the relations between the reasons for, and consequences of terrorist activity (*The Fontana*, 1998).

The **theory of disaster** also comes in highly useful. This assumes that every system (including terrorism) can be disturbed by an apparently insignificant factor, such as a failed, small terrorist attack which produced serious consequences that last for years, or generate profound social or political changes.

Another valuable concept in research into terrorism is **expected utility theory**, which addresses the question of how to make decisions in dangerous circumstances. It can therefore be applied by various institutions countering terrorism.

It can be exemplified also by the application of **models or methods from topology** (from Greek: *tópos* – place, site; *logos* – word, science). Topology is a section of mathematics dealing with the analysis of behavior of specified objects (e.g. geometric figures) which do not change even after being deformed. These features can partially be transferred to the field of social sciences. As concerns terrorism, on the one hand they can be applied to analyze the influence of various factors on terrorism. On the other one, it is possible to apply various models, such as star, circle, and network topology, to analyze the properties, models and forms of terrorism.

In a general, simplified sense, topology can also be synonymous to the absence of changes despite certain activities being undertaken. Therefore, it is the opposite of destruction, which assumes considerable, or even total, changes of a given phenomenon (e.g. terrorism) or its components. There is an intermediate form between topology and destruction, namely deconstruction (Derrida, 2004) which concerns a partial transformation of a phenomenon, for example its elements or relations. These principles can be applied to a number of varied phenomena, such as globalization, integration, nationalization and so on. They can be graphically depicted in the following manner (on the example of terrorism).

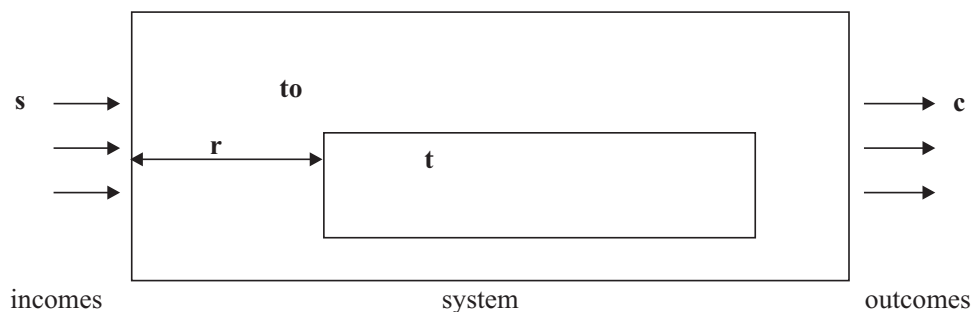
Table 2

Forms of changes within terrorism

•	→	↔
No changes	partial changes	profound or total changes
Topology of terrorism	Deconstruction of terrorism	Destruction of terrorism

Source: Author's concept.

The existing models of terrorism include the **system model** which depicts terrorism as a system comprising a series of various elements, such as terrorists, terrorist organizations, the entities that support or combat terrorism, the relations between them, and so on. This system is influenced by various factors (geopolitical, economic, ethnic, religious, ideological and other factors) and other social phenomena (e.g. fundamentalism, globalization and separatism) – incomes. The operation of this system additionally produces various outcomes, including human and material loss, political transformation and others.



t – terrorist, to – terrorist organization; s – subjects (individuals, institutions, states) that counter or support terrorism; r – relations that occur between various elements (e.g. between a terrorist organization and the entities that support it); c – consequences of terrorism

Figure 1. Terrorism and its selected components – the system model

Source: Author's concept.

The number of elements in the system under analysis can vary, as can the relations between them. Therefore, a comprehensive presentation of the above model calls for a separate and considerably more extensive study.

Another scenario involves the **model of billiard balls**, where a single manifestation of terrorism (e.g. a bomb attack) can initiate or escalate subsequent acts. This is exemplified by a certain political situation which provokes a given group to execute a terrorist attack (1). In response, a state undertakes various initiatives aiming to capture and punish the perpetrators (2). This, however, can trigger further acts of terror (3). Thus we are dealing with a so-called domino (or snowball) effect. The essence of this model is its multi-stage, cause-and-effect mechanism.

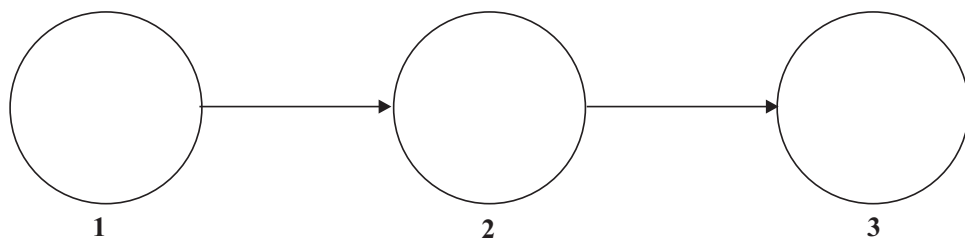


Figure 2. Terrorism presented in terms of the billiard ball model – a sample scenario

Source: Author's concept.

Another scenario involves the **core model**. This is dominated by a clearly defined element (the core) which can, to a greater or lesser extent initiate, escalate, withhold or liquidate the processes occurring within the model. The example is provided by *al-Qaeda*, which plays the main role in the *Salafi movement of global jihad*.

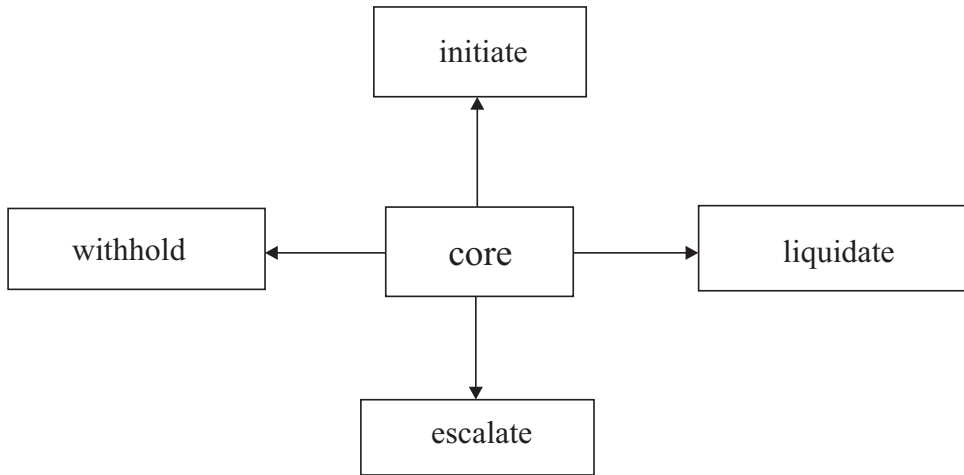


Figure 3. The core model

Source: Author's concept.

Analyzing terrorism on the basis of the core model, one of its key elements can be constituted by the influence a terrorist attack exerts on various entities, such as the victims, their families, public opinion, the state and so on.

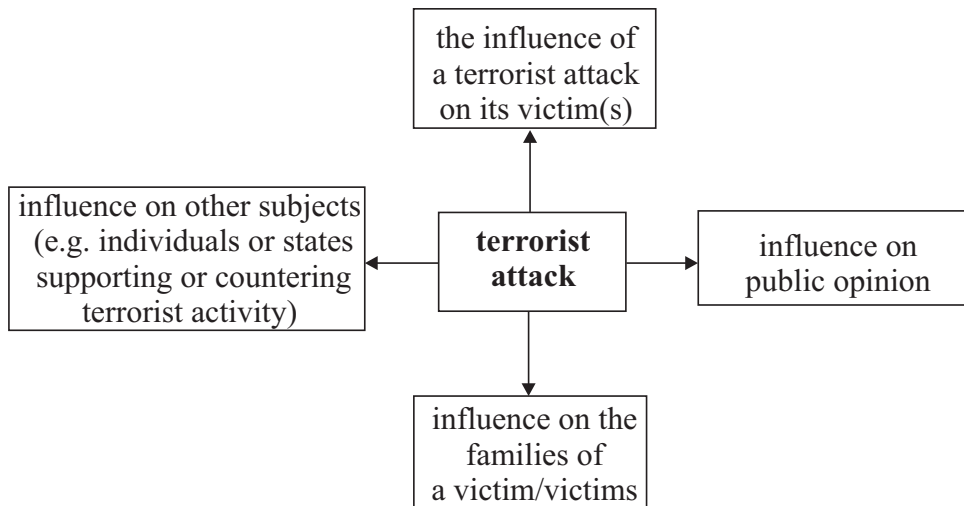


Figure 4. The influence of a terrorist attack on selected subjects – an analysis based on the core model

Source: Author's concept.

Another option is the **asymmetrical model**. It highlights the different influences of the elements of terrorism, such as its reasons (for example the increasing role of religions and the declining importance of communist ideology) or disparities (for instance in the financial or technological potential) that occur between some entities that counter terrorism and terrorist organizations (e.g. the US vs. *al-Qaeda*, the UK vs. *IRA*, etc.).

One of the properties of the asymmetrical model is that the above-mentioned qualitative or quantitative advantage one entity has over another (for example in terms of finance or technology) does not have to mean this entity's domination or victory over the potentially weaker opponent.

$$P_X > P_Y \Rightarrow C_X \geq C_Y \text{ or } C_X \leq C_Y$$

Figure 5. The asymmetrical model of terrorism

P_X – potential of entity X (a state e.g. USA or an international organization e.g. NATO); P_Y – potential of entity Y (a terrorist organization e.g. al-Qaeda); C_X – chances of entity X (a state e.g. USA or an international organization e.g. NATO) winning; C_Y – chances of entity Y (a terrorist organization e.g. al-Qaeda) winning

Source: Author's concept.

There is an increasing interest in depicting terrorism by means of the **network model** (Gunaratna, 2003; Wejkszner, 2012).

The essence of this solution is presented for example by M. Sageman, who observes that “[a] group of people [e.g. a terrorist organization – S.W.] can be viewed as a network, a collection of nodes connected through links. Some nodes are more popular and are attached to more links, connecting them to other, more isolated nodes. These more connected nodes, called hubs, are important components of a terrorist network” (Sageman, 2004).

The literature on the subject frequently refers to three basic types of networks, namely linear, centrifugal and multichannel ones. In the case of linear (chain) networks, individual elements (participants) can be unaware of who is managing the whole structure or what the network is going to do next. In centrifugal (circular) networks the orders are issued by a subject located at the network's center. All information also passes through this center; therefore this is the only subject with a comprehensive picture of the situation. In multi-channel (matrix) networks, in turn, information flows in various directions and no participant has power or control over the others.

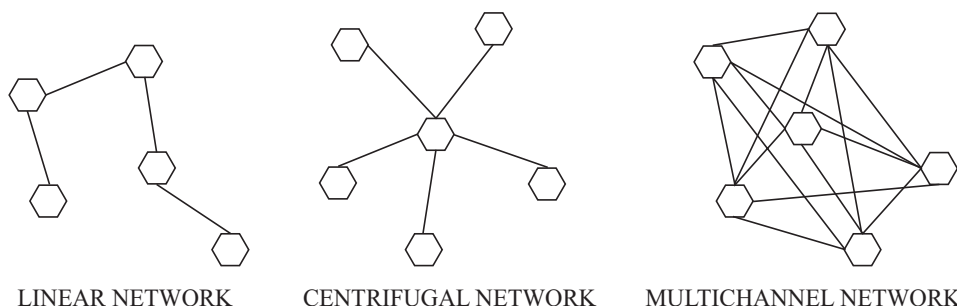


Figure 6. Basic kinds of terrorist networks

Source: J. Arquilla, D. Ronfeldt (2001), *The Advent of Netwar (Revisited)*, in: *Networks and Networks: The Future of Terror, Crime and Militancy*, (eds.) J. Arquilla, D. Ronfeldt, RAND's National Defense Research Report, p. 8.

One of the newest theories useful while researching different aspects of terrorism is the author's **concept of hybridity of terrorism**. Hybridity is understood as a combination of selected, very different (sometimes even contradictory) elements of a given phenomenon (e.g. its causes, features, kinds, effects, and others) and the analysis of various relations that occur between them, in order to show the nature, specificity or evolution of a phenomenon analyzed.

This serves the purpose of developing a new research approach allowing the presentation of both the phenomenon studied (e.g. globalization, foreign policy, security, migration or terrorism) and its relations to other phenomena and the factors that shape it.

The concept of hybridity of terrorism is based on the following assumptions:

- I) The hybrid model treats terrorism as a system of communicating vessels that encompasses various components (e.g. reasons, forms, features, outcomes) and the relations between them. Various elements of terrorism may enter into the following relations:
 - be independent of one another, as in the case of selected forms of terrorism for example,
 - complement one another, as for example traditional features (the endeavor to intimidate) and new features (network structure) do,
 - contradict one another, for example local versus global terrorism.
- II) A significant role is played by the duality concerning the substitutability (interchangeability) of certain elements of terrorism, for instance its reasons and outcomes. This may result in a situation where the factor that is a reason for terrorism in a given region (e.g. an ethnic conflict or fundamentalism) is the outcome of terrorism elsewhere and *vice versa*.
- III) This study discusses six selected manifestations of the hybridity of terrorism, namely:
 - 1) **Hybridity of Subject.** The analysis concerns the nature and specificity of terrorism as a subject of research. This is a very broad and varied issue as evidenced, among other things, by the ambiguity of the notion of terrorism, its similarity to other notions (such as terror), the multitude and diversity of definitions of terrorism and the lack of a single, commonly applied definition.
 - 2) **Hybridity of Actors.** Its essence is to show the key participants (actors) involved in the process of initiation, escalation or support for terrorism (e.g. a terrorist, a terrorist organization) and to present the relations between them.
 - 3) **Hybridity of Forms.** This concerns the variety of kinds and typologies of terrorism and the presentation of their similarities, differences and mutual relations.
 - 4) **Hybridity of Causes.** This encompasses a range of causes of terrorism and their interrelations, such as territorial and ethnic, socio-economic and psychological sources.
 - 5) **Spatial Hybridity of Terrorism** concerns its range (area), taking into consideration its local and global dimensions. What is significant is the influence of globalization on terrorism (the globalization of terrorism) as exemplified by global fear, or the stereotypes that accompany terrorism, the global strategy and tactics of terrorists, the global outcomes of terrorism and global counter-terrorism activity.

6) Hybridity of Features. In order to understand current terrorism it is important to recognize its key features and the mechanisms that shape them. They are highly diverse and they can be complementary or oppose one another. They are exemplified, for instance, by the asymmetry of terrorism, its perception as a state or process, understanding terrorism as a positive or negative phenomenon, its narrow or broad scope, and many other aspects.

IV) It can be graphically represented by means of a 'cube model' where each wall symbolizes one of the six manifestations of hybridity of terrorism, namely:

- 1) Hybridity of Subject,
- 2) Hybridity of Actors,
- 3) Hybridity of Forms,
- 4) Hybridity of Causes,
- 5) Spatial Hybridity,
- 6) Hybridity of Features.

One can construct other, alternative models, encompassing fewer or more than six manifestations of hybridity, for example the hybridity of the consequences of terrorism or the forecast of terrorism.

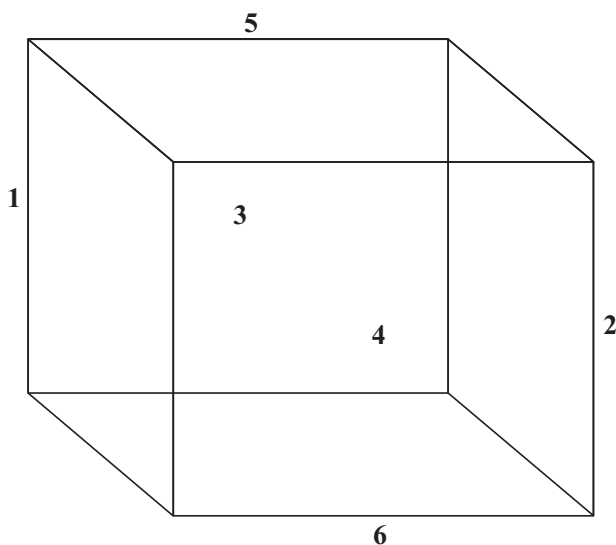


Figure 7. The cube model – six manifestations of hybridity of terrorism

1 – Hybridity of Subject, 2 – Hybridity of Actors, 3 – Hybridity of Forms, 4 – Hybridity of Causes, 5 – Spatial Hybridity, 6 – Hybridity of Features.

Source: Author's concept.

- V) Every manifestation of hybridity encompasses certain components. They may vary in number, which depends on the assumptions made by a given researcher. For example, the model under discussion assumes that hybridity of causes (manifestation 4) comprises six elements, namely:
- a) territorial and ethnic sources,

- b) religious and cultural sources,
- c) socio-economic sources,
- d) politico-historical sources,
- e) psychological sources,
- f) other sources of terrorism.

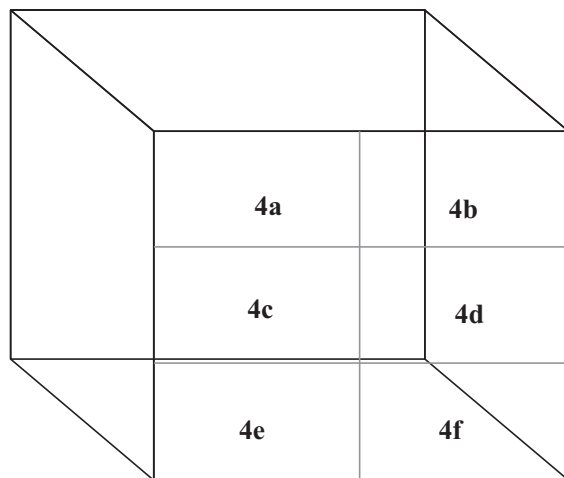


Figure 8. Hybridity of causes and its elements

Source: Author's concept.

VI) A variety of relations occur between the individual manifestations of hybridity and their elements, for instance:

- 1) **Simple relations.** These occur in case of the mutual influence of various elements included in the same form of hybridity. For example, within the framework of hybridity of causes (manifestation 4) there can occur relations between territorial and ethnic sources (element a) and the religious and cultural sources (element b) of terrorism. These relations can involve:
 - a unilateral influence, meaning that territorial and ethnic sources (element a) influence religious and cultural ones (element b), symbolized graphically as $4a \rightarrow 4b$, but element 4b does not influence element 4a,
 - a bilateral influence, meaning that territorial and ethnic sources (element a) influence religious and cultural ones (element b) and the other way round ($4a \leftrightarrow 4b$).
- 2) **Complex relations.** These concern the mutual impact of several elements belonging to different forms of hybridity, for example relations between the psychological sources of terrorism (element e) – hybridity of causes (manifestation 4), and local terrorism (element a) – spatial hybridity of terrorism (manifestation 5). These relations can involve:
 - a unilateral influence when psychological sources of terrorism (element e – manifestation 4) influence local terrorism (element a – manifestation 5), that is $4e \rightarrow 5a$, but 5a does not influence 4e,

- a bilateral influence when psychological sources of terrorism (element e – manifestation 4) and local terrorism (element a – manifestation 5) mutually influence one another ($4e \leftrightarrow 5a$).

3) Absence of relations. It is also feasible that there are no relations whatsoever between the elements included in the same form of hybridity or between the elements included in various forms of hybridity.

VII) The concept of hybridity is universal. It can be applied (taking into account different numbers of the manifestations of hybridity, which do not have to use the cubic model) to research highly varied phenomena (such as European integration, globalization, foreign policy, conflicts, and so on) and the relations that occur between them.

In conclusion, it should be emphasized that no existing model of terrorism presents a comprehensive picture of the above phenomenon. This mainly ensues from the complexity and evolutionary nature of terrorism as the research issue. This does not mean, however, that the development of new concepts should be abandoned, as exemplified by the concept of hybridity of terrorism.

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This text analyzes only selected concepts or theories. An exhaustive list of concepts that could be employed by studies on terrorism would be obviously longer. It would encompass, for example, frequency theory (with respect to probability calculus), dependency theory, domino theory, theory of structural influences, game theory, homology theory (topology), theory of social interest, the James-Lange theory, Kirkpatrick's theory, conflict theory, theory of cultural contact, model theory, regeneration theory, optimization theory, theory of organization, theory of decision-making, theory of forecasting, regime theory (theory of interdependence), theory of roles, balance theory, theory of global society, structural-functional theory (structural functionalism), utility theory, public choice theory and a range of other concepts from the areas of psychology, sociology, security, management, and so on.

The degree to which various theories are applicable in studies into terrorism is significantly different, as are the range and form in which they could be used. For example, some may be used to analyze the reasons for terrorism, while others will be helpful when considering its manifestations, results and the ways of overcoming terrorism.

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ABSTRACT

The problem of terrorism can be analyzed by means of a wide array of research theories and models. There is however a question which of these may be regarded as especially useful to analyze different aspects of terrorism such as its reasons, characteristics or effects. Among concepts or theories which more or less fulfill the above-mentioned requirements, one can mention for instance: chaos theory, decision theory, spatial competition theory, involves salience theory, exchange theory, black box theory, theory of disaster, expected utility theory, models or methods from topology, system model, model of billiard balls, core model, asymmetrical model, network model or concept of hybridity.

JAK MOŻNA ANALIZOWAĆ ZJAWISKO TERRORYZMU?

STRESZCZENIE

Zjawisko terroryzmu można analizować za pomocą wielu bardzo zróżnicowanych koncepcji funkcjonujących na gruncie różnych dyscyplin nauki, jak choćby: politologii, bezpieczeństwa, socjologii, psychologii, zarządzania, a nawet informatyki czy matematyki. W tekście zaprezentowano kilkanaście wybranych przykładów ich zastosowania odwołując się m.in. do: teorii chaosu, teorii decyzji, teorii rywalizacji przestrzennej, teorii wydajności, teorii wymiany, tzw. teorii czarnej skrzynki, teorii katastrof, teorii oczekiwanej użyteczności, modelu kul bilardowych, modelu asymetrycznego, modelu sieciowego czy hybrydowego.

Stopień przydatności poszczególnych koncepcji w badaniach nad terroryzmem jest bardzo różny. Różnorodny jest także zakres czy forma ich wykorzystania. Część z nich może posłużyć na przykład do analizy przyczyn terroryzmu, inne będą natomiast szczególnie pomocne podczas rozpatrywania jego przejawów, skutków czy sposobów przeciwdziałania.

